



Rural Business-Cooperative Service • Guaranteed Business & Industry Loan Program

## Bioeconomy Focus at Prairie Catalytic, LLC

Greenyug, LLC, founded in 2008, is a technology company that researches, develops and commercializes production of commodity chemicals, specialty chemicals, polymers, and fuels from renewable sources. It established a state of the art research facility and a demonstration plant to use existing commercially available technology through their reactive distillation process to manufacture ethyl acetate from inexpensive, renewable, and abundant bio-ethanol. Ethyl acetate, with a global market of more than \$4 billion, is a widely marketed specialty solvent used extensively in products such as paints, coatings, pharmaceuticals, adhesives, and a variety of consumer goods.



*Future site of the Prairie Catalytic, LLC plant.*

After a successful commercial performance at the demonstration plant, Greenyug, LLC through Prairie Catalytic, LLC planned to locate its 50,000 metric tonnes per annum ethyl acetate plant adjacent to the Archer Daniels Midland Company (ADM) in Columbus, NE. The new plant will use bio-ethanol as the only feed stock through the use of a bolt-on strategy ethyl acetate facility. Capital needs will be reduced significantly by co-locating at an existing biofuels facility. The ADM site benefits Prairie Catalytic, LLC as it is well connected by rail to all major market centers and export hubs. Also, ADM is an 800 acre facility producing about 400 million gallons of ethanol per year from two parallel processes, wet milling and dry milling. ADM's production capacity greatly exceeds Prairie Catalytic's ethanol need of nearly 20 million gallons per year.

Prairie Catalytic, LLC teamed up with Heartland Bank to address their financial needs. USDA Rural Development approved a 60% loan guarantee through the Business and Industry (B&I) Guaranteed Loan Program to construct the new plant. Construction of the facility is anticipated to start in late 2016 with production set to begin about a year later. The facility will position Prairie Catalytic, LLC as a renewable supplier of ethyl acetate. Prairie Catalytic, LLC has signed agreements with two of the world's largest distributors of chemicals to offtake 100% of its production capacity. The facility will create 17 jobs averaging \$31.00 per hour and will have a positive impact for Columbus, NE.

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**Obligation Amount:** \$24 Million Business and Industry Guaranteed Loan  
**Date of Obligation:** 12/01/2015

**Congressional District:** Fortenberry 01; Senators Fischer and Sasse  
**Partners:** Heartland Bank  
**Demographics:** Business is located in Columbus, population 22,111.

**Impact:** 17 jobs created.

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